

Claims:

1. A silent chain for reducing wear on a chain
5 guide surface, the chain comprising:

a plurality of link plates each having a pair of
tooth parts and pin holes, the link plates arranged in a
thickness direction as well as in a length direction,
adjacent link plates rotatably linked together using
10 linking pins,

guide links disposed on outermost sides of the
link plates and fixed to the linking pins,

wherein a distance from a pin hole centerline of
the link plate to a link plate surface facing the chain
15 guide is greater than a distance from a pin hole centerline
of the guide link to a guide link surface facing the chain
guide.

2. A silent chain according to Claim 1, wherein
20 half of a clearance distance between the pin hole of the
link plate and the linking pin in addition to a distance
from a pin hole centerline of the guide link to guide link
surface facing the chain guide is less than or equal to a
distance from a pin hole centerline of the link plate to a
25 link plate surface facing the chain guide.

3. A silent chain according to Claim 1, wherein
the guide link comprises a low rigidity guide link having
a crotch part created in the surface facing the chain
30 guide.

4. A silent chain according to Claim 1, wherein
the link plate is a rear-driven link plate having a pair of
tooth parts on either side of a pin hole centerline.

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5. A silent chain according to Claim 1, wherein surfaces at shoulder parts of the guide link on the chain guide side do not protrude beyond shoulder parts of the link plate on the chain guide side while in contact with the guiding surface of the chain guide.

6. A silent chain for reducing wear on a chain guide surface, the chain comprising:

a plurality of link plates each having a pair of tooth parts and pin holes, the link plates arranged in a thickness direction as well as in a length direction, adjacent link plates rotatably linked together using linking pins,

guide links disposed on outermost sides of the link plates and fixed to the linking pins,

wherein a distance from a pin hole centerline of the link plate to a link plate surface facing the chain guide is less than a distance from a pin hole centerline of the guide link to a guide link surface facing the chain guide.

7. A silent chain according to Claim 6, wherein the link plates have a pair of pinholes and a pair of teeth provided on either side of a center line of the pinholes.

8. A silent chain according to Claim 6, wherein half of a clearance distance between the pin hole of the link plate and the linking pin in addition to a distance from a pin hole centerline of the link plate to a link plate surface facing the chain guide is less than or equal to a distance from a pin hole centerline of the guide link to guide link surface facing the chain guide.

9. A silent chain according to Claim 6, wherein the guide link comprises a low rigidity guide link having

a crotch part created in the surface facing the chain guide.

10. A silent chain according to Claim 6, wherein
5 surfaces at shoulder parts of the guide link on the chain guide side protrude beyond shoulder parts of the link plate on the chain guide side while in contact with the guiding surface of the chain guide.

10 11. A silent chain having a plurality of links for reducing wear on a chain guide surface when the chain runs thereover, the chain comprising:

a plurality of guide plates having a pair of apertures therethrough for generally fixedly receiving pins
15 to define links, the guide plates having a contact surface;

a plurality of link plates having a pair of apertures therethrough for pivotably receiving the pins to interconnect the links, the link plates having a contact surface;

20 the guide plate apertures and the guide link apertures relatively positioned to generally maintain the guide contact surface in contact with the chain guide surface to reduce wear on the chain guide surface.

25 12. A silent chain having a plurality of links for reducing wear on a chain guide surface when the chain runs thereover, the chain comprising:

a plurality of guide plates having a pair of apertures therethrough for generally fixedly receiving pins
30 to define links, the guide plates having a contact surface;

a plurality of link plates having a pair of apertures therethrough for pivotably receiving the pins to interconnect the links, the link plates having a contact surface;

the guide plate apertures and the guide link apertures relatively positioned to generally maintain the link contact surface in contact with the chain guide surface to reduce wear on the contact surface.

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13. A silent chain according to Claim 12, wherein the guide plate contact surface comprises a plurality of teeth.